Hospitalizations Among Older Utahns: Differentials and Trends, 1992-98

Hospitalization, representing the most intensive and expensive health care, is much more common for older Utahns. A recent report by the Utah Department of Health and the Health Data Committee examined patterns of hospitalizations for Utahns 65 years of age and over.

- Using data from the Utah Inpatient Discharge Database, 1996-98, and the Clinical Classification Software (CCS), the report investigated the most common primary procedures and diagnoses among Utah-s older adult population.
- Utahns age 65 or over account for about 8% of the population, but about 24% of hospitalizations and 34% of hospital charges.

Common Reasons for Hospitalization

Figure 1. Numbers of discharges, rate per 10,000 persons, and mean charges for common hospital discharge diagnoses and procedures, men and women age 65 and over, Utah 1996-1998.

Diagnoses	Discharges*	Rate**	e** Charges***		Died****
<u>Men</u>					
Coronary atherosclerosis/heart disease	1,837	236.5	\$	19,840	1.4
Pneumonia	1,473	189.6	\$	9,575	7.7
Acute myocardial infarction	999	128.6	\$	19,876	8.5
Congestive heart failure	978	125.9	\$	8,516	5.6
Osteoarthritis	874	112.6	\$	15,936	0.2
Acute cerebrovascular disease	820	105.5	\$	9,737	11.1
<u>Women</u>					
Osteoarthritis	1,441	142.4	\$	15,048	0.1
Pneumonia	1,413	139.7	\$	8,475	6.0
Congestive heart failure	1,178	116.5	\$	7,735	5.3
Fracture neck of femur (hip)	1,116	110.3	\$	12,399	5.3
Acute cerebrovascular disease	1,076	106.3	\$	9,302	10.7
Coronary atherosclerosis	1,075	106.3	\$	17,509	1.3
Procedures					
<u>Men</u>					
Percutaneous transluminal coronary angioplasty (PTCA)	853	109.8	\$	19,207	1.3
Diagnostic cardiac catheterization	826	106.3	\$	11,647	1.9
Coronary artery bypass graft (CABG)	665	85.6	\$	36,866	3.8
Arthroplasty knee	553	71.1	\$	17,752	0.2
Hip replacement	486	62.5	\$	17,469	2.1
Transurethral resection of prostate (TURP)	483	62.2	\$	5,865	0.4
<u>Women</u>					
Hip replacement	915	90.4	\$	16,665	1.3
Arthroplasty knee	896	88.6	\$	16,919	0.1
Treatment of fracture or dislocation of hip and femur	669	66.1	\$	11,147	2.0
Diagnostic cardiac catheterization	608	60.1	\$	11,446	1.6
Upper gastrointestinal endoscopy, biopsy	585	57.8	\$	7,785	1.9
Percutaneous transluminal coronary angioplasty (PTCA)	478	47.2	\$	20,019	2.3

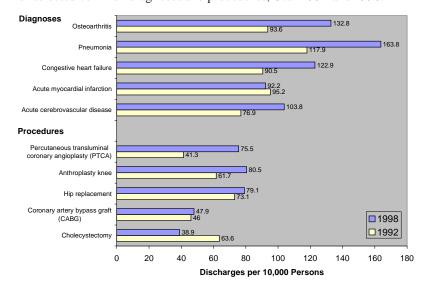
^{*} average number per year

Note: Diagnoses and procedures are not mutually exclusive and shouldn't be added together. Charges and mortality rates apply to the discharge and not necessarily to the procedure or diagnosis.

- Utah has relatively lower hospital discharge rates, shorter lengths of stay, and lower in-hospital mortality than the nation. This pattern holds overall, among both men and women, as well as in various age subgroups within the older adult population.
- The most common reasons for hospitalizations for both men and women were heart disease, pneumonia, and orthopedic conditions including osteoarthritis and hip fracture.
- Heart disease-related diagnoses were more common among men and orthopedic problems among women (see Figure 1).
- Among the discharge diagnoses examined, cerebrovascular disease, acute myocardial infarction, and pneumonia had the highest in-hospital mortality rates.
- Knee arthroplasty, diagnostic cardiac catheterization/coronary arteriograph, total
 or partial hip replacement, and percutaneous transluminal coronary angioplasty
 (PTCA) were the most frequent procedures.
- The number of annual discharges involving older adults increased by more than one-quarter from nearly 38,000 in 1992 to more than 48,000 in 1998. Mean length of stay declined by one-fifth from 6.5 days in 1992 to 5.2 days in 1996, remaining at that level through 1998. Mean hospital charges increased by nearly \$2,300 from \$9.552 in 1992 to \$11.826 in 1998.

Utilization Trends

Figure 2. Hospital discharge rates per 10,000 persons age 65 or over for selected common diagnoses and procedures, Utah 1992 and 1998.



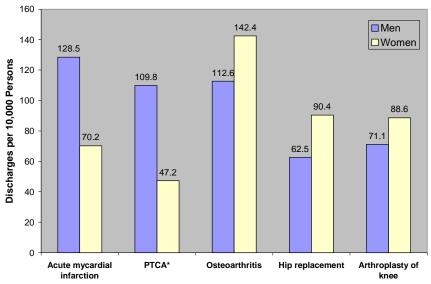
^{**} discharges per 10,000 Utahns age 65 or over per year

^{***} mean total hospital charge

^{****} percentage of patients who died in hospital

Differences Between Men and Women

Figure 3. Hospital discharge rates per 10,000 persons age 65 or over for selected diagnoses and procedures, Utah 1996-1998.

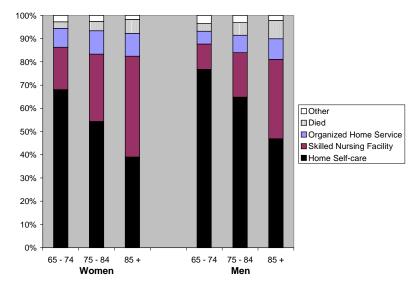


*PTCA = percutaneous transluminal coronary angioplasty

- Gender and age differences were apparent, reinforcing the view that Utah's
 older population is not homogeneous in terms of its hospitalization patterns
 and experiences.
- Osteoarthritis was the most common primary diagnosis among older adult women whereas coronary atherosclerosis and other heart disease was most common among their male counterparts.
- Men were hospitalized from 1.5 to 2.0 times as often as women for coronary artery disease-related diagnoses and procedures. Women were hospitalized 25-40% more often than men for orthopedic conditions such as osteoarthritis, hip replacement, and arthroplasty of the knee (see Figure 3).
- For most diagnoses and procedures examined, the mean length of stay and mean total charges were greater for men than women.

Discharge Status

Figure 4. Percentage of hospitalizations according to discharge status, age, and gender, Utahns age 65 or older, 1996-1998.



- Overall, about 60% of people hospitalized at age 65 or over were discharged home under self-care, and 20% to a skilled nursing facility. Four percent died in the hospital (see Figure 4).
- The percentage who were discharged home under self-care decreased from about 70% for those 65-74 to about 40% for those age 85 or over.
- Women were somewhat more likely to be discharged to a skilled nursing facility than were men.

The information in this report can help older individuals and their families to prepare for the substantial lifestyle and financial implications of hospitalizations. The full report is available on the internet at:

http://hlunix.hl.state.ut.us/hda/Reports/olderadults.pdf

Health Data Committee

The data for this report come from the Utah Statewide Hospital Discharge Database. Data were collected in cooperation with Utah's hospitals under the guidance and authority of the Health Data Committee. The Health Data Committee, established by the Health Data Authority Act (Title 26, Chapter 33, Utah Code Annotated), seeks to collect, analyze, and disseminate health data to further improvements in access, cost, and quality for Utah's health care system. For more information on the Health Data Committe, see http://hlunix.hl.state.ut.us/hda/HDC/index.htm.